VII. An undescribed Lycaenid Butterfly from Cyprus, Glaucopsyche paphos, sp. n. (Lycaenidae). By T. A. Chapman, M.D., F.R.S.

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PLATE V.

Mr. H. J. Turner has handed me some specimens of a *Glaucopsyche* from Cyprus. He mentions that there was some question as to whether they were *G. melanops*. I find them to be, so far as I can ascertain, a hitherto undescribed species.

They are very like G. melunops in size, and have a similar dark border to the wings on the upperside, but are of a darker blue, whilst beneath they are entirely without the marginal occili, which are always present,

though not conspicuous in G. melanops.

In reality the species, for which I propose the name of Glaucopsuche paphos, is very close to G. charubdis, and may perhaps be best defined by comparison of its characters with those of that species. It is smaller than G. charybdis; the largest male before me, with which the largest female agrees in this respect, has an expanse of 30 mm., the smallest 28 mm. G. charybdis in my very short series varies in expanse from 32 to 35 mm. The colour of G. paphos is a very dark blue, and a dark border to all the wings, often very marked, is always present. G. charybdis, on the contrary, is of quite a pale blue. It also has a dark border, but this is very narrow and well-defined; in G. paphos it is usually illdefined and tends to extend along the veins. The spotting of the underside, where one expects to find some distinctive character, does present one such character, but broadly the markings in both are identical. In both species the five large spots on the upper-wing may or may not be increased by one or two more of varying size. The fourth spot may be displaced outward from the regular curve that is typical, apparently more frequently in G. paphos than in G. charubdis. The spots on the underwings present the 1st, 2nd, and 3rd nearly in line, then the 3rd to 6th in a regular curve, the 7th and 8th as a TRANS, ENT. SOC. LOND. 1920.—PARTS I, II. (JULY)

pair near the hind margin, and the 9th close to the inner margin; the variations are that the 2nd may be moved basally so as to be out of line with the 1st and 3rd; the 4th may be moved out so that it is in line with the 1st, 2nd, and 3rd; the 7th, 8th, and 9th vary much as to size and even as to presence and absence. I find, however, one invariable difference; in G. charubdis the



Rough sketches of clasps of 1, Glaucopsyche paphos; 2, another specimen of C, paphos; 3, C, charybdis; 4, C, melanops; 5, C, couperi; 6, C, cyllarus.

7th, 8th, and 9th are in a row, each being about the same distance from the base, but in *G. paphos* the 9th is moved towards the base by a distance about three times that between the 7th and 8th. Neither species has any marginal markings (representing occili) to the hind-wings as occurs in *G. melanops*.

The upper surface of the \mathcal{S} is black; in one specimen there is some blue scaling on the hind-wings, strongest towards the hind margin. The \mathcal{S} appendages of \mathcal{S} . puphos

are of the same type as in the rest of the genus Glaucopsyche, though with a distinguishing character that does not, I

think, preclude their belonging to it.

On Plate V are photographs of the appendages of *G. paphos* and *G. charybdis*. Very good figures of the appendages of *G. cyllarus* and of *G. melanops* will be found in Tutt's "British Lepidoptera," vol. xi, pl. xxxi (p. 299), these being the only European species of the group.

I figure here rough camera sketches of the clasps of these four species, and also of *G. couperi*, an American species. The few other species I have examined, such as *G. lygdamas* and *G. lycormas*, have clasps very close to

those of G. couperi and G. cyllarus.

The form of clasp, with spine parallel to distal margin, is characteristic of *Lycaena* and *Glaucopsyche*. The two genera may be distinguished by the myrmicicole habits of *Lycaena*, *Glaucopsyche* living on ordinary vegetarian diet.

The clasps sketched show the spine to be smooth on both margins in *G. charybdis, G. couperi* and *G. cyllarus*, as it is in other species of *Glaucopsyche* mentioned, such as *lycormas* and *lygdamas*. The new form from Cyprus is the only one I have met with with the distal margin toothed.

G. paphos has the clasp narrower than in the other forms, the distal end is markedly oblique, in the others it is so slightly so, as to allow the clasps to be described as approximately rectangular. G. charybdis has a flange-like ridge (marked a in sketch) and the same ridge is seen in G. cyllarus. This is really a slight fold or fullness, marking the line of one of the attachments of the clasp to its base. It is absent in other species such as G. couperi

and G. paphos.

The figure of *G. melanops* is given on account of the close resemblance of *G. paphos* and *G. claryphis* to it. Yet the clasps certainly suggest that *G. melanops* should be in a distinct genus. In this connection I should like to comment on an opinion I appear to have held in 1910, as reported in Tutt's "British Butterflies," vol. xi, p. 299. I there suggested putting *G. melanops* in *Lycaena*; this is obviously inadmissible, as it is not myrmicicole and the form of the clasp is also strongly against it. The latter character, no doubt, appears to forbid its being a *Glaucopsyche* (type *lyydamas*). I propose nevertheless to leave it

